Programare concurentă și distribuită

- MSD2 – Enache Rareș – Homework 1

1. **Usage**

   To launch the server, one has to open a terminal (under a Linux machine) and run the following command:
   > *python3 server.py <sock_proto> <buff_size>*

   → where ***<sock_proto>*** is either *TCP* or *UDP*;
   → where ***<buff_size>*** is an integer value, representing the package size (defaults to 512 bytes);

   To launch the client, one has to repeat the same steps, only replacing the file name (*server.py → client.py*) and to specify the filename to transfer as a third parameter. The file has to reside in the root directory of both server.py and client.py.

   Due to file sizes, I did not upload any sample file. One will have to place some file under the root directory and specify its name as the third parameter when launching the client.
   *Note: If the file name is not specified, it defaults to **send**.*

2. **Testing**
   The system was tested using two files of different sizes. One was ~30MB, the other just above 1GB.

   Over TCP/IP protocol, the 30MB file takes ~5-6 seconds to be transferred from the client to the server. For the +1GB file, it takes 1 minute and 3 seconds.

   Over UDP protocol, the 30MB file takes just above 13 seconds to be transferred from the client to the server. For the +1GB file, it takes

Note: Tests were done on localhost.